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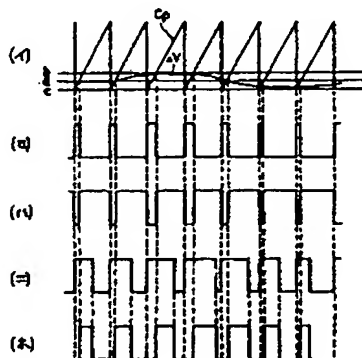
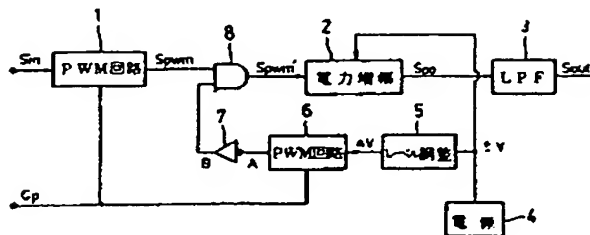
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APPLICATION NUMBER : 59158987

APPLICANT : AKAI ELECTRIC CO LTD;

INVENTOR : ISHIKAWA TSUTOMU;

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TITLE : POWER SUPPLY VOLTAGE
FLUCTUATION CORRECTING
METHOD IN PULSE WIDTH
MODULATION AMPLIFIER



ABSTRACT : PURPOSE: To eliminate output fluctuation due to power supply voltage fluctuation by detecting the fluctuation of a power supply voltage fed to a power amplifier circuit, converting the detected signal into a digital signal and using the digital signal so as to correct an input signal.

CONSTITUTION: When an input signal Sin is an analog signal, a level adjusting circuit 5 adjusts a level of a power supply voltage $\pm V$ fed to a power amplifier circuit 2 from a power supply 4 and detects the fluctuation. That is, the level of a power supply voltage $+V$ is decreased by a ΔV , the power voltage is set to a level (a) when it is a specified voltage to a sawtooth reference pulse C_p so that the upper limit of the expected fluctuation is a level (b) and the lower limit is within a level (c), and the fluctuated voltage ΔV is inputted to a pulse width modulation (PWM) circuit 6. The PWM circuit 6 applies the pulse width modulation to the fluctuated voltage ΔV to convert it into a digital signal. That is, the fluctuated voltage ΔV is compared with the reference pulse C_p to output a signal A of pulse width modulation waveform going to "H" only at $\Delta V > C_p$. The duty of the signal A is selected to 10% at, e.g., the specified voltage so as to attain level adjustment by the level adjusting circuit.

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